

APRIL/MAY 2023

**FBT21/CBT21/BBT21 — BIOCHEMISTRY**

Time : Three hours

Maximum : 75 marks

**SECTION A — (10 × 2 = 20 marks)**

**Answer ALL questions**

1. What is heteropoly Saccharides?
2. Differentiate amylose and amylopectin.
3. What are essential amino acids?
4. How melanin is formed?
5. List any two functions of lipids.
6. Name the regulatory enzyme in cholesterol synthesis.
7. Draw the structure of ATP.
8. Define nucleoside.
9. Give an example of peptide hormone.
10. List any two function of Vitamin C.

**SECTION B — (5 × 5 = 25 marks)**

**Answer ALL questions**

11. (a) Outline the pay off phase of glycolysis.

Or

- (b) Briefly explain the structure and functions of polysaccharides.

12. (a) Discuss how proteins are digested and absorbed.

Or

- (b) Demonstrate the tyrosine metabolism and the products formed.

13. (a) Give a detailed note on phospholipids.

Or

- (b) Summarize the process of lipid digestion and absorption.

14. (a) Discuss the structure of Purines with examples.

Or

- (b) Compare and contrast the types of DNA.

15. (a) Illustrate the functions and deficiency disorders of vitamin A?

Or

- (b) Discuss the principle of Agarose gel electrophoresis.

**SECTION C — (3 × 10 = 30 marks)**

**Answer any THREE questions**

16. Elaborate on the steps involve the Glycogenesis and glycogenolysis.

17. Classify the protein based on structure and function.

18. Discuss the cholesterol biosynthetic pathway and its importance.

19. Explain the IUB system of enzyme classification with examples.

20. Summarize the structure and physiological functions of thyroxine.